

NOTES

1. TO PREVENT "FLASH-CONFLICT" PROBLEMS. INSERT RED FLASH PROGRAM BLOCKS FOR ALL UNUSED VEHICLE LOAD SWITCHES IN THE OUTPUT FILE. THE INSTALLER SHALL VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS. } (A)
2. ENSURE THAT RED ENABLE IS ACTIVE AT ALL TIMES DURING NORMAL OPERATION. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS. TIE UNUSED RED MONITOR INPUTS 9,10, 11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE CABINET MANUFACTURER'S INSTRUCTIONS. } (B)
3. PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN. } (C)
4. ENABLE SIMULTANEOUS GAP-OUT FEATURE. ON CONTROLLER UNIT. FOR ALL PHASES. } (D)
5. PROGRAM PHASES 4 AND 8. ON CONTROLLER UNIT. FOR DUAL ENTRY. } (E)
6. PROGRAM PHASES 2 AND 6. ON CONTROLLER UNIT. FOR VARIABLE INITIAL AND GAP REDUCTION. } (F)
7. PROGRAM PHASES 2, 4, 6 AND 8 FOR 'STARTUP PED CALL'. } (G)
8. THE CABINET AND CONTROLLER ARE PART OF (insert) SYSTEM. } (H)

NOTES

ALL ELECTRICAL DETAILS HAVE A SECTION OF NOTES. A TYPICAL SET FOR A 2070 DESIGN IS SHOWN ABOVE. SOME VARIANT OF THE FIRST FOUR NOTES APPEAR ON ALL 2070 DETAILS. THE REMAINING NOTES ARE USED AS NEEDED.

USAGE GUIDELINES:

- (A) FLASH SETUP NOTE - THE FIRST SENTENCE, CONCERNING FLASH COLOR SETUP ON UNUSED LOAD SWITCHES, MAY BE OMITTED IF ALL LOAD SWITCHES ARE USED. THE SECOND SENTENCE IS ALWAYS USED.

THE NOTES LISTED ABOVE ARE COMMONLY USED AND APPEAR ON THE START DRAWINGS FOR 2070 DESIGNS. UNNEEDED NOTES SHOULD BE REMOVED. ADDITIONALLY, IF THERE IS A NEED TO HIGHLIGHT AN UNUSUAL SETTING OR FEATURE ABOUT THE SIGNAL DESIGN THAT IS NOT COVERED ELSEWHERE ON THE ELECTRICAL DETAIL, A CUSTOM NOTE CAN BE ADDED TO THIS SPACE.

NOTES (cont.)

- (B) RED MONITORING NOTE - THE VERSION SHOWN AT LEFT IS FOR CONTRACTOR SUPPLIED DESIGNS. THE NOTE DIRECTS THE INSTALLER TO TIE UNUSED RED MONITOR INPUTS TO LOAD SWITCH AC+. THIS SHOULD BE DONE FOR ANY CHANNEL BELONGING TO AN UNUSED LOAD SWITCH, A PEDESTRIAN MOVEMENT, A VEHICLE MOVEMENT WHERE SIGNAL SEQUENCE MONITORING IS NOT DESIRED, OR ONE USED FOR AN ALTERNATIVE FUNCTION SUCH AS A LIGHTED SIGN. FOR PROJECTS USING STATE SUPPLIED EQUIPMENT, A DIFFERENT NOTE IS USED AND A RED MONITORING BOARD PROGRAMMING DETAIL MUST BE SHOWN. SEE STD. NO. 7.0 FOR INFORMATION ON THE RED MONITOR BOARD.
- (C) CONTROLLER START UP NOTE - IN GENERAL, THE CONTROLLER SHOULD BE PROGRAMMED TO START UP IN THE PHASE OR PHASES THAT FLASH YELLOW. IF NO PHASES FLASH YELLOW, THE CONTROLLER NEEDS TO BE PROGRAMMED TO START UP IN A RED CLEARANCE INTERVAL. IF THIS IS THE CASE, CONSULT THE SIGNAL PLAN DESIGNER TO SEE IF THERE IS A PREFERENCE ABOUT WHAT PHASE(S) SHOULD BE SERVED FIRST.
- (D) SIMULTANEOUS GAP-OUT NOTE - DIRECTS THAT ALL PHASES BE PROGRAMMED FOR SIMULTANEOUS GAP-OUT. THIS NOTE ALWAYS APPEARS AND NEVER REQUIRES MODIFICATION.
- (E) DUAL ENTRY NOTE - DIRECTS THAT THE INDICATED PHASES BE PROGRAMMED FOR DUAL ENTRY. THE '2070L TIMING CHART' ON THE SIGNAL PLAN WILL SPECIFY WHICH PHASES REQUIRE THIS FEATURE.
- (F) VARIABLE INITIAL AND GAP REDUCTION NOTE - DIRECTS THAT THE INDICATED PHASES BE PROGRAMMED FOR THESE TIMING FEATURES. IF THE '2070L TIMING CHART' ON THE SIGNAL PLAN HAS TIMING VALUES FOR 'SECONDS PER ACTUATION' AND 'MAX VARIABLE INITIAL', THAT PHASE SHOULD BE PROGRAMMED FOR VARIABLE INITIAL. IF VALUES ARE SHOWN FOR 'TIME BEFORE REDUCTION', 'TIME TO REDUCE', AND 'MINIMUM GAP', THE PHASE SHOULD BE PROGRAMMED FOR GAP REDUCTION.
- (G) START UP PED CALL NOTE - ANY PED PHASES THAT WILL BE IN USE DURING NORMAL OPERATION AND ARE NOT PROGRAMMED FOR PED RECALL SHOULD BE LISTED HERE.
- (H) SYSTEM NOTE - IF THE SIGNAL IS PART OF A CLOSED LOOP OR URBAN TRAFFIC CONTROL SYSTEM, THE SYSTEM TYPE AND/OR NAME (IF AVAILABLE) IS LISTED HERE.

Notes

SIGNALS MANAGEMENT SECTION
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

7-04

STD. NO.

6.0

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